

Some additions to the Coleopterous fauna of the Canary Islands

(Coleoptera)

BY

G. ISRAELSON.

Hässelholm, Suecia.

During a few summer weeks in 1964-66 I had the opportunity to study the coleopterous fauna of some of the western and central Canary Islands. The fauna was certainly not at its best in the rainless season and my collections are not very extensive. Still they have proved to contain several interesting forms, among which the following species are representatives of genera which have not, to my knowledge, been published before from the islands.

***Ptilium fuscum* (Er., 1848).**

Ptilium fuscum Erichson, 1848. *Natur. Ins. Deutschl.*, III, p. 28 (Germany).

Tenerife: Agua Mansa, about 1.100 m., in cow's droppings 8 specimens, 11-VII-1964.

Identical with the North European form.

***Lispinus impressicollis* Mostch., 1907.**

Lispinus impressicollis Motschulky, 1907. *Verh. zool.-bot. Ges. Wien*, LVII, p. 372 (Japan).

Gran Canaria: Tafira Alta, Jardín Canario, about 400 m., 5 specimens sieved from a heap of decaying leaves and dead branches.

The substrate was rather dry at the moment and the dominating accompanying beetles were *Silvanus unidentatus* F., *Arthrolips piceus* Com., *Holoparamaceus caularum* Aubé, and *Monotoma bicolor* Villa.

Known from Madeira and the Azores (Lundblad, 1954).

Nudobius canariensis n. sp

Holotype: female. Canary Islands: La Palma, Barranco de los Hombres, about 1.000 m., 17-VI-1966 (Nr. 888). In my collection.

Head distinctly narrowing forwards from posterior corners. Inner frontal furrows slightly but clearly s-shaped. Umbilical punctures somewhat elongate longitudinally but rarely confluent, very sparse except in an area inside and behind eyes, entirely lacking in a broad medial zone. Eyes very flat. Microsculpture usually clear, of undulating and mainly transversal lines and scattered punctures.

Pronotum with dorsal series of 7 punctures. Microsculpture as in head.

Elytra widening backwards, with indistinct longitudinal rows of rather scattered punctures but with no clear microsculpture. Wings well developed.

Abdomen with fine and scattered punctures. Microsculpture like that of head but transversal lines usually more lightly impressed and punctures rare.

Coloration. Head black except for marginal and central portion of anterior front and for one patch at posterior angles being dark red. Neck dark red. Pronotum red. Scutellum and elytra brownish yellow. Abdomen brown except for posterior margins of tergites 3-6 being somewhat lighter and for posterior third of 7th tergite and entire 8th tergite being yellowish red. Antennae with proximal segments dark red and outer segments dark brown. Palpae and legs reddish yellow.

Measurements (in millimetres). Total length 9.5 (abdomen slightly stretched). Head length (from frontal margin) 1.54, width 1.38, height 0.78. Eye length (side view) 0.33. Temple length (side view) 1.02.

Paratype: female. Same data as for holotype. Body length 8.7 mm.

Among the species dealt with by Coiffait (1956) in his synopsis of the European and Mediterranean species of the genus *N. canariensis* comes next to *N. collaris* Er. of which I have seen a female specimen collected in France. The former species differs from the latter in the following respects. The head is distinctly widening from the hind margin of the eyes and up to the posterior corners and therefore is relatively broader. Furthermore vertex and front are more arqued transversely (with *collaris* strongly flattened). The temples are longer and

the eyes shorter (index 3.1 against 2.7 for *collaris*). The elytra are more distinctly widening backwards. The micropuncturation is somewhat weaker all through and is hardly visible in the elytra. The antennae are darker in colour but scutellum and elytra are slightly paler.

At the type locality *N. canariensis* lived in a giant pine, evidently rather recently windfallen since the bark was still firmly attached to the wood. In addition to *Nudobius* the following coleoptera were noted: *Falagria concinna* Er. (not previously recorded from the Canary Islands), *Temnochila coerulea pini* Brullé, *Laemophloeus* sp., *Corticaria* sp., *Aulonium sulcicolle* Woll., *Dinoderus brunneus* Woll., *Hypophloeus pini* Panz., *Criocephalus* sp. (certainly not identical with *C. rusticus* L.), *Hylotrupes bajulus* L., *Eremotes crassicornis* Brullé, *Crypturgus concolor* Woll., and *Orthotomicus nobilis* Woll. (see below). Most of these species were seen single or in small numbers only but the *Scolytidae* were numerous and hatching.

***Ischnoglossa pulchella* n. sp.**

Holotype: male. Canary Islands: La Palma, Roque del Faro, about 1300 m, 10-VI-1965 (Nr. 476). In my collection.

Head very slightly enlarged behind eyes, and with posterior half semicircular. Punctures very fine and scattered. Microreticulation weak.

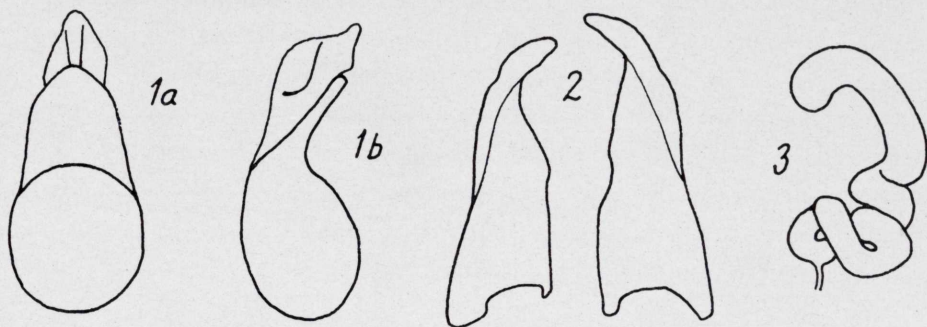
Pronotum wider than long (index 1.2), with rounded sides and corners, and with a slight impression in front of scutellum. Punctures fine and scattered and somewhat granulate. Microreticulation weak. Median hairs pointing straight backwards but resting hairs directed rather strongly outwards. Lateral hairs at most as long as 5th antennal segment.

Elytra wider than long, slightly widening backwards in nearly straight lines. Puncturation strong, granulate and close. Microreticulation weak. At suture and lateral margin hairs are pointing backwards but elsewhere back- and outwards. Wings well developed.

Abdomen nearly parallel-sided up to 8th tergite and with transverse impressions at base of tergites 3-6, rather strongly but not very closely and somewhat granulate puncturate. Puncturation not markedly thinner backwards. Not very closely provided with rather long hairs.

Tergite 7 at posterior portion with a small median protuberance. Tergite 8 rather strongly tapering but at posterior margin with a slightly obtuse-angled and somewhat crenulate incision. Microsculpture of more or less transverse meshes, usually weak but at 7th tergite rather strong.

Antennae about $1/4$ the length of body. Segments 2 and 3 about equal in length, segments 5-9 about $1\frac{1}{2}$ times wider than long, segment 11 slightly longer than segments 9 and 10 combined.



Figs. 1-3.—*Ischnoglossa pulchella* n. sp.: 1) penis (internal sac partly turned out), holotype, *a* ventral view, *b* lateral view; 2) parameres, holotype; 3) spermatheca, paratype female.

Tibial bristles inconspicuous, no longer than hairs.

Penis, fig. 1a and b. Parameres, fig. 2.

Coloration. Head and 6th tergite and base of 7th tergite black. Pronotum reddish yellow. Elytra brownish yellow except for an irregularly triangular portion around scutellum and a longitudinal lateral band being brown. Resting tergites brown except hind margins and hind half of 7th and entire 8th tergites being brownish yellow. Legs and palpal yellow but 3rd segment of maxillar palpal brownish. Antennae brown except segments 1-4 being yellowish brown.

Measurements (in millimetres). Total length 2.7. Head width across eyes and at enlarged portion behind eyes 0.41. Pronotum length 0.42, width in front 0.43, in middle 0.50, at posterior margin 0.46. Elytra length (suture) 0.44, width at shoulders 0.58, at hind corners 0.64. Antennae length 0.73.

Paratypes: male and female. Same data as for holotype.

The female essentially differs from holotype in having the posterior margin of 8th tergite hardly noticeably incised and not crenulate, in hind margin of 6th sternite being obtuse, and in lacking protuberance at 7th tergite.

Spermatheca, fig. 3.

The new species is well distinguished from the European *I. proluxa* Gr. not only in size and colour but also in a number of other characters including the shape of aedeagus and spermatheca. The spermatheca of *I. proluxa* has been drawn by Palm (1955, p. 137, fig. 1, 2).

The latter species is stated to have been found in Madeira (Lundblad l. c.).

The habitat of *I. pulchella* was under the dry, loosening bark of a big fallen pine trunk. Together with this species occurred solitary specimens of *Temnochila coerulea pini* Brullé, *Criocephalus* sp., and *Eremotes crassicornis* Brullé, and, in fungi living on the trunk, *Metophthalmus* sp., *Corticaria* sp., and *Sphindus dubius* Gyll. (see below).

***Microstagetus parvulus* Woll., 1861.**

Microstagetus parvulus Wollaston, 1861. *Ann. Mag. Nat. Hist.* (3), VIII, p. 106 (Madeira).

Same data as for *Lispinus impressicollis* (see above), 12 specimens.

I have compared my material with a syntype in the British Museum, and the identity is perfect. *M. parvulus* was described from Madeira but was later reported from Abyssinia also (by Paulian according to Lundblad l. c.).

***Lindorus lophantae* (Blaisd., 1892).**

Scymnus lophanthae Blaisdell, 1892. *Ent. News*, III, p. 51 (California!). Australia.

Gran Canaria: Tafira Alta, Jardín Canario, about 400 m, 2 specimens swept from the vegetation and 1 specimen knocked from *Plocama pendula*, 28-VI-1965. Tenerife, 1 specimen swept from ground vegetation on the northern outskirts of Puerto de la Cruz, about 50 m, 1-II-1964 (Folke Olsson leg.). La Palma: Las Nieves, about 150 m, swept from barranco vegetation, probably from *Euphorbia*, 1 specimen, 10-VI-1965; Barranco de las Angustias, about 300 m, 1 specimen knocked from either *Euphorbia* or *Kleinia*, 13-VI-1965; Roque del Faro, about 1100 m, 4 specimens knocked from *Erica arborea*, 18-VI-1965.

Not known from Madeira by Lundblad (l. c.) but recorded from there by Bialewski (1963).

Like *Rodolia cardinalis* Muls. this Australian species has been introduced on purpose by man in various subtropical areas, evidently also in the Canary Islands where it seems to have acclimatised perfectly and to be now widely distributed and common at rather different levels and in different habitats.

***Sphindus dubius* (Gyll., 1808).**

Nitidula dubia Gyllenhal, 1808. *Inst. Suec.*, I, p. 249 (Sweden).

Tenerife: Agua Mansa, about 1100 m, by sieving the rotten wood of a big fallen pine, 16 specimens, 4-VII-1964. La Palma, above Roque del Faro, in a myxomycetous fungus on the *Ischnoglossa*-trunk (see above), 43 specimens, 19-VI-1965.

The Canarian form corresponds to the North-European one in all essentials, also regarding the male sexual equipment and is hardly specifically distinguished from the latter. Nevertheless the separation of the two forms never offers any difficulties. In the Canarian specimens the punctures of pronotum and elytra are distinctly smaller and more weakly impressed. Furthermore the hairs covering the body are clearly somewhat longer.

Probably the form living in the Canary Islands constitutes a separate subspecies. I shall refrain, however, here from creating a name for it since I have not had the opportunity to study the forms from any other parts of the rather vast distributional area of the species, except North-Europe.

***Scolytus amygdali* Guér., 1847.**

Scolytus amygdali Guérin, 1847. *Ann. Soc. ent. France, Bulletin*, p. XLVII (France).

La Palma: Barranco de Jurado, about 800 m, 1 female swept from the grass and herbaceous vegetation under cultivated almond trees, 16-VI-1965.

The specimen corresponds to the description given by Balachowsky

(1949). But I have not seen any material for comparison so I cannot say for certain if the present form is identical with the Mediterranean one.

***Orthotomicus nobilis* (Woll., 1862).**

Tomicus nobilis Woll., 1862. *Ann. Mag. Nat. Hist.* (3rd series) ix, p. 441 (Canarias), 1864, p. 254. *Ips nobilis* auctt.

T. nobilis was described as a species though with some hesitation as appears from the comment of the author: "I am far from certain, however, that the present *Tomicus* is in reality distinct from the Madeiran *T. erosus*" (Wollaston, 1864, p. 255). More recent authors agree in accepting *T. erosus* as an *Orthotomicus* and, strangely enough, also in classifying *T. nobilis* among *Ips*.

In La Palma (in the *Nudobius*-trunk, see above) I have collected a series of a species fitting the description of *T. nobilis* and from Tenerife I have seen another series of the same species (leg. Th. Palm in coll. S. Palmqvist). I have also had the opportunity of examining 3 syntypes of *T. nobilis* from Tenerife, 1 from La Palma, and 2 specimens of *T. erosus* from Madeira (coll. Sampson), all in the British Museum. As might be expected both species have proved to belong to one and the same genus, viz. *Orthotomicus*, as defined in modern works.

In all essentials *O. nobilis* appears to be an enlarged copy of the Madeiran *O. erosus*. The Madeiran specimens of the latter species are 3.3 and 3.4 mm in length (Balachowsky gives the figures 3.0-3.5) and about 1.25 mm in width. In the former species the length is 3.7-4.3 mm and the width 1.38-1.6 mm, according to the material seen by me.

The arrangement and shape of the teeth at the margin of the elytral declivity is the same in both species but the teeth are stronger with *O. nobilis*, though hardly improporportionally so. Likewise the undulations at the apical portions are more marked with *O. nobilis*. The length of 2nd segment of the antennal funicle is about 1/3-1/4 of that of 1st segment and the subcircular antennal club has curved sutures in both species.

Nor have the sclerotized portions of the male sexual organs proved to show any notable differences in the two species. They remind very much of those of the North-European *O. proximus* Eichh. though the apical portion of the flagellum is not quite so sharply curvate in the last-named species.

Wollaston observed that the puncturation, particularly that of the posterior region of the pronotal disc, was stronger with *nobilis* than with *erosus*. Among other minor differences that may prove to be of some significance can be mentioned that the microreticulation of the abdominal sternites is weak but always clear with *nobilis* but most indistinct with the Madeiran *erosus*.

The genus *Ips* does probably not exist in the Canary Islands and should be excluded from the fauna until further evidence has been produced.

The characteristic exit-holes of *O. nobilis* were not uncommon at places in the basal portions of the trunks even in seemingly quite sound older pines. It seems, therefore, that this beetle may play a role as a primary assailant of the trees. It is a well-known fact that drying up of the habitat may make conifers less resistant against the attacks of certain scolytids. It is possible that the early attacks which may open a rapid wood destruction are in this case a result of the ever increasing desiccation being, in its turn, a consequence of drawing off the water from the mountains for irrigating purposes at lower levels.

ACKNOWLEDGEMENT.

Mrs. Christina Israelson, my wife and permanent companion in the Canary Islands, was my incomparable aider during our travels.

The following gentlemen have, in a most obliging and generous way, provided me with comparative material: Prof. Dr. J. Balfour-Browne, London, Prof. Dr. H. Coiffait, Toulouse, Mr. Folke Olsson, Hässlholm; and Mr. S. Palmqvist, Hälsingborg.

The manuscript was read from the linguistic point of view by my friend Mr. I. Andersson, Hässlholm.

To all these persons I express my sincere gratitude.

SUMMARY.

The following genera are reported probably for the first time from the Canary Islands: *Ptiliolum*, *Lispinus*, *Nudobius*, *Ischnoglossa*, *Microstagetus*, *Lindorus*, *Sphindus*, *Scolytus*, and (replacing *Ips*) *Orthotomicus*. Descriptions are given of *Nudobius canariensis* n. sp. and *Ischnoglossa pulchella* n. sp.

Bibliography.

BALACHOWSKY, A.

1949. Coléoptères Scolytides. *Faune de France*, t. I.

BIALEWSKI, R.

1968. *Coccinellidae* von Madeira. X. *Soc. Sci. Fenn. Comment. Biol.*, tomo XXV, 2.

COIFFAIT, H.

1956. Les *Xantholimitae* de France. *Rev. Franç. d'Entom.*, t. XXIII.

LUNDBLAD, O.

1958. Die Arthropodenfauna von Madeira 35. Die Käferfauna der Insel Madeira. *Ark. f. Zool.*, 2, t. XI, 30.

PALM, TH.

1955. Anteckningar om svenska skalbaggar. X. *Entom. Tidskr.*, t. LXXVI.

WOLLASTON, T. V.

1864. *Catalogue of the Coleopterous Insects of the Canaries*. London.

